

REMARKS

Claims 1-5, 11-13 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Briggs et al. (US 5,131,065) in view of Roitman et al. (US 6,680,570). Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Briggs et al. (US 5,131,065), as applied to claim 1 above, and further in view of Webster (US 5,274,405). Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Briggs et al. (US 5,131,065), as applied to claim 1 above, and further in view of Melville (US 6,205,275). Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Briggs et al. (US 5,131,065), as applied to claim 1 above, and further in view of Lowry et al. (US 6,396,985).

Regarding the rejection of claims 1-5, 11-13 and 16-20, the Examiner states that admitted prior art discloses an OLED display device comprising a substrate (12), an array of OLED elements (30, 19, 18) wherein the light emitted is incoherent (for example, see Fig. 1 of the present application), the Briggs reference teaches an OLED display device that uses a fiber-optic faceplate (see for example Fig. 3), and the Roitman reference teaches the OLED elements defining an optical cavity so as to provide an improved OLED that has a predictable color output (for example, see col. 1, lines 40-44 and col. 2, lines 41-64), and that one of ordinary skill in the art would have found it obvious to use a fiber-optic faceplate as taught by Briggs in place of the transparent substrate of the admitted prior art in order to provide greater luminance and better contrast, and to have the OLED elements define an optical cavity as taught by Roitman so as to provide an OLED with better color control. Reconsideration of this rejection is respectfully requested.

While individual elements of the claimed invention may be separately disclosed in the prior art, there is no teaching or suggestion to employ such individual elements in the claimed combination in order to obtain the advantages taught in accordance with present invention. Specifically, as explained at page 6, lines 3+ of the specification, while use of optical cavities has been previously taught, a significant drawback of such technology in display applications is color change as display is viewed at angles other than orthogonal.

In accordance with the present invention, however, where such optical cavity structures are employed in combination with a fiber-optic faceplate, no such disadvantage is seen as emitted light that passes into the optical fibers will be reflected and mixed as it passes through the fiber. Further, as discussed at page 4, line 26 to page 5, line 21, the use of an optical cavity in combination with a fiber-optic face plate advantageously increases the amount of light emitted orthogonally to the surface of the OLED light emitting element, thereby increasing the amount of light taken into the optical fibers. Thus, the present invention enables the advantages of increased light output and color control to be obtained without the disadvantage of increased angle dependency. Such combined advantages are not taught or suggested by the cited prior art, and the present invention of claim 1 and the dependent claims is accordingly believed patentable thereover.

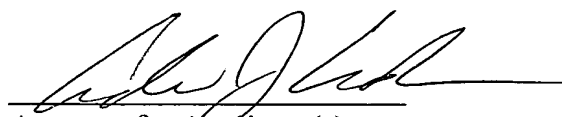
Additionally with respect to claims 11-13, the Examiner states that Briggs reference shows the fiber-optic faceplate including one fiber (82) per OLED element or per group of elements (see Fig. 3). Reconsideration of this finding is further respectfully requested. As described by Briggs et al at col. 4, lines 8-13, pixel points in the device thereof are formed where front and back layer electrodes cross. Thus, the areas of the individual light emitting elements of the device of Fig. 3 are defined by the overlapping widths of the crossing electrodes 64 and 56. Fig. 3 of Briggs clearly shows the use of a face plate comprised of many optical fibers 82 across the width of each electrode 56, rather than the use of a face plate comprising only one fiber per light emitting element (overlapping area of crossing electrodes) or group of elements. This is clear as while only one fiber may be individually illustrated and numbered above some of the electrodes 56, the dimensions of the illustrated and numbered fibers are such that it is clear the face plate comprises many fibers across the width of each electrode. This is more clearly illustrated in Fig. 6 of Briggs, where multiple fibers are explicitly shown across the width of each light emitting element (defined in the Fig. 6 embodiment by the combined width of 106 and 110, as described at col. 9, lines 28-32). The use of a face plate comprising a single fiber per OLED element or per group of elements as claimed in claims 11-13 provides an additional advantage in that light from each OLED element or group of elements is transmitted through the face plate primarily through an associated single fiber, thus providing improved apparent resolution, and improved color

mixing when the group of elements comprises differently colored elements. Thus, the invention of claims 11-13 is further distinguished from Briggs et al additionally on this ground. While Applicant believes that the original presented claim language clearly sets forth such a single fiber per OLED element or group of elements requirement (i.e., the ratio of fibers per OLED elements, or per group of elements, is expressly set at one), the present amendment expressly includes such inherent limitation, removing any possible perceived ambiguity. Support for such amendment may be found, e.g., in Figs. 5 and 6, and the associated text at page 6, lines 19-25.

Regarding claims 6-10 and 14-15, the further applied references of Webster, Melville and Lowry et al. also fail to teach the specifics of the invention as claimed in claim 1, and thus such dependent claims are also believed patentable over the applied art for at least the same reasons.

In view of the foregoing amendments and remarks, reconsideration of this patent application is respectfully requested. A prompt and favorable action by the Examiner is earnestly solicited. Should the Examiner believe any remaining issues may be resolved via a telephone interview, the Examiner is encouraged to contact Applicants' representative at the number below to discuss such issues.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.